

Amend the paragraph at page 7, lines 2-12 of the specification to read as follows:

C2
A first object of the present invention aims at a closed end screwed steel pile, the forward end of the pile body of which is open, or a closed end screwed steel pile, the entire forward end of the pile body of which is closed by a bottom plate. It is a first object of the present invention to provide a screwed steel pile characterized in that: when the ground strength is suddenly increased, the pile can easily penetrate into the ground; and a high intensity of bearing capacity can be finally provided.

Amend the paragraph at page 17, lines 1-3 of the specification to read as follows:

C3
Fig. 13 is a perspective view of a screwed place file having two spiral wings of the present invention, wherein the view is taken from the lower side.

Amend the paragraph at page 17, lines 13-14 of the specification to read as follows:

C4
Fig. 15 is a plan view of the screwed steel pile shown in Fig. 16.

Amend the paragraph at page 18, line 23 to page 19, line 1 of the specification to read as follows:

C5
In the embodiment shown in Figs. 1(a) and 1(b), one piece of one roll of the spiral wing 2 made of a steel plate is welded onto the outside 1a at the forward end portion of the pile body 1 composed of a steel pipe. The forward end portion 2a of the wing 2 is arranged at the same level as that of the forward end face 1b of the pile body 1. Vickers Hardness (HV) of mild steel is usually 120 to 150. On the other hand, Vickers Hardness (HV) of abrasion resistance steel is higher than 300 because abrasion of the wing is restrained in a deep depth and excavation performance is maintained. Furthermore, the use of this kind of steel is more

C5
effective to restrain the increase of the coefficient of friction between the steel wing and the soil and the sand. Therefore, it is effective to use an abrasion resistance steel plate for the wing. In this case, abrasion resistance steel or an abrasion resistance steel plate is defined as steel or a steel plate stipulated by JIS G3115, JIS G3106, JIS G3120, JIS G3128, SPV 450N, SPV 450Q and SM 570Q.

Amend the paragraph at page 28, lines 10-25 of the specification to read as follows:

C6
Construction of the screwed steel pile according to the present invention will be explained below based on Fig. 13 and Fig. 18. This screwed steel pile is drilled into the ground as follows. While the pile body 1 is being rotated by a motor of a heavy construction machine which is put at the top portion of the pile body 1, the pile body 1 is penetrated into the ground by a pushing device of the pile driver. Since the excavating blade 3 composed of the protruding portion 2a and the extending portion 2d of the wing is protruding downward to a lower portion of the pile body 1, soil and sand at the forward end of the pile is weakened by the excavating blade 3. The thus drilled soil and sand is easily moved to an upper portion of the main body of the wing 2 which continues to the excavating blade 3. Therefore, the force of excavation can be regenerated.

Amend the paragraph at page 28, line 34 to page 29, line 9 of the specification to read as follows:

C7
The screwed steel pile according to the present invention will be explained below. In this screwed steel pile, as shown in Figs. 13 and 16, the inside 5a of the bottom plate ring 5, which is a doughnut-shaped disk, protrudes to the pile center side compared with the inside

C7
1a of the pile body 1. Therefore, the corner portion 7, which is recessed, is formed by the upper face 5b of the bottom plate ring 5 and the inside 1a of the pile body. Due to the above structure, soil and sand on the lower face 5c side of the bottom plate ring 5 is not excessively compressed and restricted but smoothly pushed into the pile body 1.

Amend the paragraph at page 31, lines 5-7 of the specification to read as follows:

C8
A model of the dynamic state in which forces act on the top portion of the pile and the bottom plate portion is shown in Fig. 19.

Amend the paragraph at page 32, lines 15-17 of the specification to read as follows:

C9
The forward end bearing capacity Q_u of the pile can be found by the following equation.

Amend the paragraph at page 33, lines 15-17 of the specification to read as follows:

C10
The pulling capacity Q_{up} of a pile end with respect to pulling is found by the following expression.

Amend the paragraph at page 37, lines 17-19 to read as follows:

C11
(i) While the screwed pile composed of a steel pipe is being rotated and driven, it is penetrated into the ground 100, the depth of which is 8 to 9 m.

Amend the paragraph at page 39, lines 8-14 of the specification to read as follows:

C12
The pipe pile penetration device 51 as shown in Fig. 22 includes: a screwed pile 1; an auger screw 73; and a double doughnut type auger machine 55 (motor) shown in Fig. 22 and

C.12
Fig. 25 for driving the pile 1 and the auger screw 73 respectively. The auger machine 55 includes: a pile drive section 81 for rotating the pile 1; and an auger drive section 82 for rotating the auger 73 normally and reversely.

Delete the following paragraphs from the specification.

At page 43, delete the paragraph at lines 27-28 which reads: "An embodiment according to claims 1 to 4 will be explained."

At page 45, delete the paragraph at lines 11-12 which reads: "Another embodiment according to claims 1 to 4 will be explained."

At page 46, delete the paragraph at lines 32-33 which reads: "Still another embodiment according to claims 1 to 4 will be explained."

At page 48, delete the paragraph at lines 15-18 which reads: "Next, embodiments of the screwed pile of the present invention described in claims 5 and 6 will be explained below. In this case, the fourth to seventh embodiment will be explained referring to the drawings."

At page 50, delete the paragraph at lines 3-4 which reads: "An embodiment described in claims 11 to 13 will be explained below."

At page 51, delete the paragraph at lines 23-24 which reads: "Another embodiment described in claims 11 to 13 will be explained below."